REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject application are respectfully requested in light of the amendments above and the comments which follow.

As correctly noted in the Office Action Summary, claims 22-42 were pending. Claims 32-40 and 42 have been withdrawn. By the present response, claims 22, 25-31 and 41have been amended and claims 43-45 have been added. Thus, upon entry of the present response, claims 22-31, 41 and 43-45 are pending and await further consideration on the merits.

Support for the foregoing amendments can be found, for example, in at least the following locations in the original disclosure: page 3, lines 18-28; and the original claims.

CLAIM OBJECTIONS

Claims 26 and 27 are objected to on the grounds set forth in paragraph 3 of the Official Action. Specifically, use of the term "optionally" is objected. By the present response, claims 26 and 27 have been amended in a manner which is believed to address this informality. Thus, reconsideration and withdrawal of the objection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §112

Claims 28-30 stand rejected under 35 U.S.C. §112, second paragraph, on the grounds set forth in paragraph 4 of the Official Action. This rejection is respectfully traversed.

Claims 28 and 30 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite on the grounds set forth in paragraph 4 of the Official Action. More specifically, it is asserted therein that claims 28 and 30 appear to be broader than claim 22 since claim 22 recites a maximum reducibility temperature of at most 500°C, wherein claims 28-30 recite a calcination temperature of 900°C and 1000°C, which is outside of the temperature range recited in claim 22. In fact, claims 28-30 are not inconsistent, or broader than claim 22, from which they depend.

Claim 22 specifies a composition which has a maximum reducing temperature of at most 500°C. The term "reducibility" refers to the capacity of the composition to be reduced in a reducing atmosphere, and to be reoxidized in an oxidizing atmosphere (see, e.g. page 1, lines 25-30 of the present specification). The reducibility of the composition may be determined by measuring the capacity of the composition to capture hydrogen as a function of temperature. The maximum reducibility temperature corresponds to the temperature at which the compositions ability to capture hydrogen is greatest (see, e.g., page 5, lines 1-8 of the present specification).

Claim 22 also requires, as a separate feature, the composition having a specific surface area of at least 40 m^2/g after calcination for 6 hours at 500°C this feature of the claimed composition is a measure of the stability of the surface area of the composition under elevated temperature conditions. Thus, this recitation in claim 22 refers to an entirely different property or characteristic of the claimed composition, which is obviously distinct from the maximum reducibility temperature.

Claims 28-30 are not directed to the maximum reducibility temperature limitation of claim 22. Instead, claims 28-30 further specify the specific surface area

stability property claim 22. For instance, claims 28-30 further specify the surface area of the composition measured after heating the composition to higher temperature levels than that specified in claim 22. Thus, claims 28-30 further limit the specific surface area characteristic or feature recited in claim 22.

For at least the reasons noted above, reconsideration and withdrawal of the rejection is respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

Claims 22-31 and 41 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,214,306 to Aubert et al. (hereafter "*Aubert*") on the grounds set forth in paragraph 5 of the Official Action. For at least the reasons noted below, this rejection should be withdrawn.

The present invention is directed to a composition, methods for its preparation, and use as a catalyst, which possess certain beneficial characteristics and properties. Thus, a composition formed according to the principles of the present invention may exhibit, *inter alia*, improved reducibility (i.e., the capacity of the composition to be reduced in a reducing atmosphere and to be reoxidized in an oxidizing atmosphere), at lower temperatures when compared to similar conventional compositions (see, e.g. page 1, line 25 - page 2, line 5 of the present specification).

A composition formed according to the principles of the present invention is set forth in claim 22. Claim 22 recites:

> *22. A composition comprising zirconium oxide and cerium oxide, the composition comprising a zirconium oxide proportion of at least 50% by weight, a maximum reducibility temperature of at most 500°C, a specific surface area of at least 40m^2/g after calcination*

for 6 hours at 500°C, and comprising a predominant tetragonal phase.

Aubert et al. and the present application are owned by the same assignee. *Aubert et al.* fails to anticipate the composition recited in claim 22.

As evident from the above, claim 22 requires, *inter alia*, a composition comprising "a maximum reducibility temperature of at most 500°C." By contrast, *Aubert et al.* fails to contain any disclosure whatsoever concerning the reducibility capacity/temperature characteristics of the compositions described therein. Thus, *Aubert et al.* clearly fails to anticipate the composition recited in claim 22.

As noted above, *Aubert et al.* is also owned by the assignee of the current application. With respect to the reducibility/temperature relationship of the compositions described in *Aubert et al.,* Applicants advise that reducibility/temperature measurements made on the compositions described in *Aubert et al.* have shown a maximum reducibility temperature of about 580°C. Such a maximum reducibility temperature clearly fails to anticipate the maximum reducibility temperature of at most 500°C required by claim 22. Therefore, not only does *Aubert et al.* fail to expressly disclose each and every element required by claim 22, it also fails to inherently disclose a composition which comprises each and every element recited in claim 22. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

The remaining claims depend from claim 22. Thus, these claims are also distinguishable over *Aubert et al.* for at least the same reasons noted above.

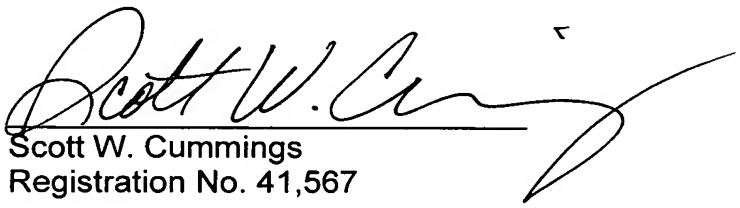
CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is earnestly solicited. Should the Examiner feel that any issues remain, it is requested that the undersigned be contacted so that any such issues may be adequately addressed and prosecution of the instant application expedited.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: March 27, 2009

By: 

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